

REVIEWS

Flora Malesiana, Series II–Ferns and Fern Allies, Volume 3, edited by the Flora Malesiana Editorial Committee. 1998. Rijksherbarium/Hortus Botanicus. Publications Department, P.O. Box 9514, 2300 RA Leiden, The Netherlands. iv, 334 pp. Softcover (ISBN 90-71236-39-0). 100 Dfl. [available in the U.S. from Balogh Scientific Books, www.balogh.com, for \$60 + shipping].

The present volume is the seventh installment of the Malesian pteridoflora and includes treatments of the Polypodiaceae (by P. H. Hovenkamp and five collaborators), Davalliaceae (by H. P. Nootboom), Azollaceae (by R. M. K. Saunders), Cheiroleuriaceae (by J. E. Laferrière), Equisetaceae (by J. E. Laferrière), Matoniaceae (by M. Kato), and Plagiogyriaceae (by X. C. Zhang and H. P. Nootboom). Those familiar with this long-running series (the first pteridophyte fascicle was published in 1959) will find the format quite similar to that of previous parts, with the exception that the species entries are now in a single rather than double column and have been set in a slightly larger typeface, making the work easier to read. As with previous installments, the text is “dense” with discussions and listing of synonyms, typification, and taxonomic interpretations, as well as literature citations, all quite valuable as few other detailed sources of information such as this presently exist for paleotropical regions. There are also lengthy discussions of economic uses, phytochemistry, cytology, spore morphology, and other topics as pertinent. Genera and species are treated alphabetically within families. The descriptions are relatively complete, although (as in previous parts), the distributional and ecological data are relatively brief. There are a number of excellent drawings and photographs, which are numbered as figures independently within each family treatment.

Most of the volume is devoted to the Polypodiaceae, with 18 genera and 183 species in the region. The remaining 6 families account for only 9 total genera and 45 species. Interestingly, the treatments of the two small paleotropical relict families Cheiroleuriaceae and Matoniaceae cover all of the known species and amount to small monographs of these groups. The treatment of Azollaceae (including only a single Malesian species, *Azolla pinnata*) also has five pages of thorough and interesting summary of the symbiotic relationship with cyanobacteria and the concomitant economic importance of the plant in the region.

The family Davalliaceae is of particular horticultural interest. Fern growers interested in reading about *Humata* species will find these submerged in a broadly circumscribed *Davallia*, in keeping with recent systematic studies. The SEM photos of enlarged segments with sori are of particular help in determining the 23 species treated in this genus, and there are two keys to species, so if a given specimen doesn't seem to key out well the first time an alternative set of characters is available.

In the Polypodiaceae, another family of considerable horticultural interest to North American growers, the generic classification generally follows that of HENNIPMAN et al. in the "Families and Genera of Vascular Plants" volume. An exception is the inclusion of *Phymatosorus* in *Microsorium*. For this genus and *Selliguea*, there are secondary keys to species in different geographic subsets of the Malesian region.

In total, this is another outstanding contribution to the Flora Malesiana. In addition to the inclusion of some groups of relatively great horticultural and economic importance, this particular installment will be of value to anyone seeking to understand the modern generic classification of the taxonomically complex Polypodiaceae, which, except for the aforementioned very expensive "Families and Genera" volume, previously has not been summarized in detail in an accessible form for the Old World species.—GEORGE YATSKIEVYCH, Missouri Botanical Garden, P.O. Box 299, St. Louis, MO 63166-0299.

Bibliografía sobre Gametofitos de Helechos y Plantas Afines, 1699–1996, by Blanca Pérez-García and Ramón Riba. Monographs in Systematic Botany from the Missouri Botanical Garden, volume 70. 1998. Missouri Botanical Garden Press, 4344 Shaw Blvd., St. Louis, MO 63110. 98 pp. Softcover (ISBN 0-915279-61-4, ISSN 0161-1542). \$20.00 plus \$4.00 shipping/handling.

This useful bibliography covers nearly 300 years of publications on various aspects of pteridophyte gametophytes. The brief introduction is in Spanish and might have been printed in English as well. However, most non-Spanish speaking pteridologists will be able to understand the gist, if not the details, of the half page that this covers, and the introduction is not necessary to the use of the remaining matter. The main 75 pages of the volume contain the lengthy bibliography itself, arranged in a single alphabetical sequence of 2195 entries. Each entry is followed by one or more numerical codes in parentheses, referring to numbered headings in a subject index that follows. Similarly, a taxonomic index containing a single alphabetical sequence of genera and families has these numerical codes following each author/date citation.

A key to the contents of the subject index appears on p. 2, between the introduction and the main text, again in Spanish. The technical terms are sufficiently similar to their English equivalents as to be usable without translation. The subject index has two main subject headings, spores and gametophytes. The Spores heading is further broken into five subheadings ranging from factors affecting germination to ultrastructure. The factors affecting germination are further subdivided into eight subject areas, ranging from methodological concerns to environmental stimuli like temperature, light, and chemicals. The Gametophytes heading is similarly broken into a number of subject headings. As with any attempt to organize a large body of diverse literature into discrete subject headings, there are inevitable problems of selection of headings and overlapping subject areas in a given paper. The authors have done a creditable job of balancing the tendency to divide the subject